Power LED Beam 56 Narrow

owners manual

GLX LIGHTING

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POWER LED BEAM 56 NARROW

Thanks for choosing the GLX LIGHTING PLB-56N. The PLB-56N is a full RGB color mix par can DMX-512 controllable, made up of highly efficient and bright LED's measuring 10 mm in diameter. The PLB-56N can operate in Stand-Alone, Master/ Slave or via DMX-512 control utilizing 7 DMX channels. All red, green and blue LEDs can be controlled separately allowing the creation of an unlimited range of colors. In order to make the best use of your led light, please read the following carefully.

Unpacking Instructions
Immediately upon receiving a product, carefully unpack the carton, check the contents to ensure that all parts are present, and have been received in good condition. Notify the shipper immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a led light must be returned to the factory, it is important that the led light be returned in the original factory box and packing.

Important notes
1. Read these instructions.
2. Keep these instructions.
3. Do not use the PLB-56N near water.
4. Clean only with dry cloth.
5. Install in accordance with the manufacturer's instructions.
6. Do not block any ventilation openings.
7. To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
8. Protect the power cord from being walked on or being pinched.
9. Unplug this apparatus when unused for long periods of time.

There are no user serviceable parts inside. All servicing has to be done by qualified service personnel. Servicing is required when the PLB-56N has been damaged in any way, such as when the power supply cord or plug is damaged, when objects have fallen onto the PLB-56N when it has been exposed to rain or moisture, or when the PLB-56N does not operate normally.

Warning: damages caused by the disregard of this user manual are not subject to warranty.

AC Power
This led light has an autoswitching power supply that can accommodate a wide range of input voltages and will accommodate between 100~240 VAC. All led lights must be powered directly off a switched circuit and cannot be run off a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel is used solely for a 0% to 100% switch.

Warning! All led lights must be connected to circuits with a suitable earth ground.

Channel	Intensity Control of
1	Red
2	Green
3	Blue
4	Color Macros
5	Strobe/Speed
6	Programs
7	Dimmer

Function dip switches
On the back of the PLB-56N you will find 10 dip switches. These dip switches have the following functions:
Dip switches 1-2: Red level (1 on = 50%, 2 on = 75%, 1-2 on = 100%)
Dip switches 3-4: Green level (1 on = 50%, 2 on = 75%, 1-2 on = 100%)
Dip switches 5-6: Blue level (1 on = 50%, 2 on = 75%, 1-2 on = 100%)
Dip switch 8: Music/ Auto activation switch. When switched on the small switch on the left will be activated. Music: Sound Activated, Rotary knob sets sound sensitivity Auto: Rotary knob sets speed of program.
Dip switch 9: Very slow color change program Music/Auto switch has no function in this mode
Dip switch 10: DMX input activated

Master/ slave mode
In this mode, the first unit in the daisy chain will automatically command all other units following. The Master/ slave mode will allow you to link up to as many units you want in a daisy chain fashion. This mode can be handy when you want to operate without a mixing console.
1 Connect all PLB-56N in a daisy chain. (Connect the (male) 3 pin connector side of the DMX cable to the output (female) 3 pin connector of the first led light. Connect the end of the cable coming from the first led light which will have a (female) 3 pin connector to the input connector of the next led light consisting of a (male) 3 pin connector. Then, proceed to connect from the output as stated above to the input of the following led light and so on..
2 The dip switch setting on the slave unit(s) require that only dip switch #10 be set to the “On” position. (DMX input)
3 Set all dip switches on the Master unit to the “Off” position and the unit will run it’s built in color change program.
Set Music/ Auto switch to Music for sound-activated triggering of the program. Set Music/ Auto switch to Auto then use the rotary dial to adjust speed of the program -See below under dip switch options for additional program settings.

DMX Control Mode
Using the PLB-56N in DMX mode gives the user the greatest flexibility when it comes to customizing or creating a show. In this mode you will be able to control each individual trait of the led light and each led light independently. The PLB-56N uses 7 channels of control. You can use every DMX mixing console to control the PLB-56N.

Setting the DMX address
Set the start address using the group of dip switches located on the back of the led light. Each dip switch has an associated value. Adding the value of each switch in the ON position will provide the start address. Determining which switches to toggle ON given a specific start address can be accomplished in the following manner. By subtracting the largest switch value possible from the selected start address until zero is achieved.

EXAMPLE STARTING ADDRESS

Address 10

Pin # 4 = 8
Pin # 2 = 2
Total = 10

Address 24

Pin # 5 = 16
Pin # 4 = 8
Total = 24

Resolving address using simple math.

Address 233

233 – (128) = 105, Turn ON DIP # 8
105 – (64) = 41, Turn ON DIP # 7
41 – (32) = 9, Turn ON DIP # 6
9 – (8) = 1, Turn ON DIP # 4
1 – (1) = 0, Turn ON DIP # 1

You will most likely use the first available number which maybe number 1. This number was selected for example purposes.

DIP SWITCH	(DMX VALUE)
1	1
2	2
3	4
4	8
5	16
6	32
7	64
8	128

Each led light requires a start address in the range of 1 to 511. A led light requiring one or more channels for control begins to read the data on the channel indicated by the start address. For example, a led light that occupies or uses 7 channels of DMX and was addressed to start on DMX channel 100, would read data from channels: 100, 101, 102, 103, 104, 105 and 106.

DMX Dipswitch Quick Reference Chart

DMX Address Quick Reference Chart

DIP Switch Position

DMX DIP SWITCH SET																				
0=OFF					#9	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
1=ON					#8	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1
					#7	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1
X=OFF or ON					#6	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
#1	#2	#3	#4	#5																	
0	0	0	0	0			32	64	96	128	160	192	224	256	288	320	352	384	416	448	480
1	0	0	0	0		1	33	65	97	129	161	193	225	257	289	321	353	385	417	449	481
0	1	0	0	0		2	34	66	98	130	162	194	226	258	290	322	354	386	418	450	482
1	1	0	0	0		3	35	67	99	131	163	195	227	259	291	323	355	387	419	451	483
0	0	1	0	0		4	36	68	100	132	164	196	228	260	292	324	356	388	420	452	484
1	0	1	0	0		5	37	69	101	133	165	197	229	261	293	325	357	389	421	453	485
0	1	1	0	0		6	38	70	102	134	166	198	230	262	294	326	358	390	422	454	486
1	1	1	0	0		7	39	71	103	135	167	199	231	263	295	327	359	391	423	455	487
0	0	0	1	0		8	40	72	104	136	168	200	232	264	296	328	360	392	424	456	488
1	0	0	1	0		9	41	73	105	137	169	201	233	265	297	329	361	393	425	457	489
0	1	0	1	0		10	42	74	106	138	170	202	234	266	298	330	362	394	426	458	490
1	1	0	1	0		11	43	75	107	139	171	203	235	267	299	331	363	395	427	459	491
0	0	1	1	0		12	44	76	108	140	172	204	236	268	300	332	364	396	428	460	492
1	0	1	1	0		13	45	77	109	141	173	205	237	269	301	333	365	397	429	461	493
0	1	1	1	0		14	46	78	110	142	174	206	238	270	302	334	366	398	430	462	494
1	1	1	1	0		15	47	79	111	143	175	207	239	271	303	335	367	399	431	463	495
0	0	0	0	1		16	48	80	112	144	176	208	240	272	304	336	368	400	432	464	496
1	0	0	0	1		17	49	81	113	145	177	209	241	273	305	337	369	401	433	465	497
0	1	0	0	1		18	50	82	114	146	178	210	242	274	306	338	370	402	434	466	498
1	1	0	0	1		19	51	83	115	147	179	211	243	275	307	339	371	403	435	467	499
0	0	1	0	1		20	52	84	116	148	180	212	244	276	308	340	372	404	436	468	500
1	0	1	0	1		21	53	85	117	149	181	213	245	277	309	341	373	405	437	469	501
0	1	1	0	1		22	54	86	118	150	182	214	246	278	310	342	374	406	438	470	502
1	1	1	0	1		23	55	87	119	151	183	215	247	279	311	343	375	407	439	471	503
0	0	0	1	1		24	56	88	120	152	184	216	248	280	312	344	376	408	440	472	504
1	0	0	1	1		25	57	89	121	153	185	217	249	281	313	345	377	409	441	473	505
0	1	0	1	1		26	58	90	122	154	186	218	250	282	314	346	378	410	442	474	506
1	1	0	1	1		27	59	91	123	155	187	219	251	283	315	347	379	411	443	475	507
0	0	1	1	1		28	60	92	124	156	188	220	252	284	316	348	380	412	444	476	508
1	0	1	1	1		29	61	93	125	157	189	221	253	285	317	349	381	413	445	477	509
0	1	1	1	1		30	62	94	126	158	190	222	254	286	318	350	382	414	446	478	510
1	1	1	1	1		31	63	95	127	159	191	223	255	287	319	351	383	415	447	479	511

DIP Switch Position DMX Address

DMX Appendix

There are 512 channels in a DMX-512 connection. Channels may be assigned in any manner. A led light capable of receiving DMX-512 will require one or a number of sequential channels. The user must assign a starting address on the led light that indicates the first channel reserved in the controller. There are many different types of DMX controllable led lights and they all may vary in the total number of channels required. Choosing a start address should be planned in advance. Channels should never overlap. If they do, this will result in erratic operation of the led lights whose starting address is set incorrectly. You can however, control multiple led lights of the same type using the same starting address as long as the intended result is that of unison movement or operation. In other words, the led lights will be slaved together and all respond exactly the same.

DMX Channel Values

Channel	Value	Function	Notes
1	000 ⇔ 255	**Red:** (0% ~ 100%)	
2	000 ⇔ 255	**Green:** (0% ~ 100%)	
3	000 ⇔ 255	**Blue:** (0% ~ 100%)	
4		**Macro Colors (By LED levels)**	
	000 ⇔ 007	Off	
	008 ⇔ 015	Red: 100% Green: 20% Blue:	
	016 ⇔ 023	Red: 100% Green: 40% Blue:	
	024 ⇔ 031	Red: 100% Green: 60% Blue:	
	032 ⇔ 039	Red: 100% Green: 80% Blue:	
	040 ⇔ 047	Red: 100% Green: 100% Blue:	
	048 ⇔ 055	Red: Green: 100% Blue:	
	056 ⇔ 063	Red: Green: 100% Blue: 20%	
	064 ⇔ 071	Red: Green: 100% Blue: 40%	
	072 ⇔ 079	Red: Green: 100% Blue: 60%	
	080 ⇔ 087	Red: Green: 100% Blue: 80%	
	088 ⇔ 095	Red: Green: 100% Blue: 100%	
	096 ⇔ 103	Red: Green: Blue: 100%	
	104 ⇔ 111	Red: 20% Green: Blue: 100%	
	112 ⇔ 119	Red: 40% Green: Blue: 100%	
	120 ⇔ 127	Red: 60% Green: Blue: 100%	
	128 ⇔ 135	Red: 80% Green: Blue: 100%	
	136 ⇔143	Red: 100% Green: Blue: 100%	
	144 ⇔ 151	Red: 100% Green: 25% Blue: 100%	
	152 ⇔ 159	Red: 100% Green: 50% Blue: 100%	
	160 ⇔ 167	Red: 100% Green: 75% Blue: 100%	
	168 ⇔ 175	Red: 100% Green: 100% Blue: 100%	
	176 ⇔ 183	Red: 100% Green: 100% Blue: 25%	
	184 ⇔ 191	Red: 100% Green: 100% Blue: 50%	
	192 ⇔ 199	Red: 100% Green: 100% Blue: 75%	
	200 ⇔ 207	Red: 100% Green: 100% Blue: 100%	
	208 ⇔ 215	Red: 20% Green: 100% Blue: 100%	
	216 ⇔ 223	Red: 40% Green: 100% Blue: 100%	
	224 ⇔ 231	Red: 60% Green: 100% Blue: 100%	
	232 ⇔ 239	Red: 80% Green: 100% Blue: 100%	
	240 ⇔ 247	Red: 100% Green: 100% Blue: 100%	
	248 ⇔ 255	Red: 50% Green: 50% Blue: 50%	
5	000 ⇔ 255	**Strobe or Speed:** (0% ~ 100%)	
6		**Preset Programs**	
	000 ⇔ 127	No Function	
	128 ⇔ 159	Fade Program: Use Ch 5 to adjust speed	
	160 ⇔ 223	Color Chase: Use Ch 5 to adjust speed	
	224 ⇔ 255	Color Chase: Use rotary knob to adjust speed	
7	000 ⇔ 255	**Dimmer:** (0% ~ 100%)	

Replacing the fuse

Only replace the fuse by one of same type and rating. Before replacing the fuse, unplug the PLB-56N!
Step 1: Open the fuse holder on the rear panel with a fitting screw driver.
Step 2: Remove the old fuse from the fuse holder.
Step 3: Install the new fuse in the fuse holder
Step 4: Remount the fuse holder in the housing

Should you need any spare parts, please use genuine parts. If the power supply cable of this device becomes damaged, it has to be replaces by a special power supply cable available at your dealer. Should you have further questions, please contact your dealer.

Technical Specifications

LIGHT SOURCE	
LED	108 X 10mm (25 red, 25 green, 25 blue)
Illuminance @ 1 m	2550 lux @1meter
Beam Angle	25°
CONTROL & PROGRAMMING	
Data input	locking 3-pin XLR male socket
Data output	locking 3-pin XLR female socket
Data pin configuration	pin 1 shield, pin 2 (-), pin 3 (+)
Protocols	DMX-512
Channels	7
POWER	
Auto-switching power supply	100V~240 VAC, 50/ 60Hz
Power consumption	22w
Fuse	20mm 2A fast blow
WEIGHT & DIMENSIONS	
Length	210mm
Width	220mm
Height	230mm
Weight	1,2kg